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Docket No. UF-258CXC1
Serial No. 09/925,336Remarks

Claim 22 is pending in the subject application. Favorable consideration of the pending claim is respectfully requested.

The applicants wish to thank Examiner Coe for the courtesy extended to the undersigned during the personal Examiner Interview conducted on August 22, 2005. This response is submitted in accordance with the substance of that interview and constitutes a summary thereof.

Claim 22 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Soler-Serratosa (Nematropica (1996), vol, 26, no.1, pp.57-71) in view of Momol *et al.* (Phytopathology 89(6):S54, June 1999) and Canadian Pat. Appl. No. 2,012,288. The applicants respectfully traverse this ground for rejection.

Please note that the Soler-Serratosa *et al.* reference does not provide any teaching that is directly relevant to the control of *Ralstonia*. Rather, Soler-Serratosa *et al.* conducted experiments to ascertain whether thymol combined with another ingredient (benzaldehyde) could be used to control nematodes. Although the Soler-Serratosa *et al.* results were quite variable (depending upon both the target nematode as well as the specific composition used), the authors conclude that the thymol/benzaldehyde combination shows "synergistic" activity and, therefore, may be useful to control certain parasitic nematodes.

Soler-Serratosa *et al.* emphasize that "combinations in which benzaldehyde was applied in 100 ppm showed synergistic effects in suppressing initial and final soil populations of *M. arenaria* and *H. glycines*." (Abstract, emphasis added). Also, at pages 61-62, the authors state:

Populations of *M. arenaria* in roots were reduced synergistically by thymol/benzaldehyde combinations (Fig. 3b). By themselves, thymol and benzaldehyde did not affect soil or root populations of *M. arenaria*, but application of 100 ppm benzaldehyde to soil treated with thymol resulted in reduced numbers of *M. arenaria*. A similar trend was evident for *H. glycines* in soil but not in roots (Fig. 4). Synergistic effects also were observed in the decline of populations of Dorylaimoid nematodes (Fig. 5b).

The applicants respectfully submit that the emphasis of Soler-Serratosa *et al.* on the synergistic combination of thymol/benzaldehyde, in effect, teaches away from the applicants'

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formulation wherein thymol can be used at a non-phytotoxic concentration for effective control of *Ralstonia*.

Soler-Serratosa *et al.* clearly acknowledge the problem of phytotoxicity; however, again the Soler-Serratosa *et al.* approach teaches away from the current invention. Whereas the current applicants have found a way to utilize thymol (without a synergist such as benzaldehyde), Soler-Serratosa *et al.* merely suggest increasing the time between treating the soil and planting. In contrast, the applicants' claim specifically recites that the tomato plants are planted in the soil within 25 days of application of the fumigant to the soil.

As stated by Dr. Momol in his attached Expert Declaration under 37 CFR §1.132:

The Soler-Serratosa *et al.* paper only pertains to nematode control and, in particular, experiments that indicated that thymol could be combined with 100 ppm benzaldehyde to achieve a synergistic combination for the control of certain parasitic nematodes. From my experience, I know that *Ralstonia* is extremely hard to control with soil fumigants, especially without phytotoxicity. There is no reason to expect that one component of a composition that shows synergy in the control of nematodes would be useful as a soil fumigant for the control of *Ralstonia*.

In summary, the results of Soler-Serratosa *et al.*'s experiments pertaining to nematode control are highly variable and the authors conclude that a thymol/benzaldehyde synergistic combination "could compete with commercially available nematicides" (page 69). To the extent that these results can be extrapolated at all, the applicants respectfully submit that they do not lead in the direction of the applicants' use of thymol for the control of *Ralstonia*.

The applicants are cognizant that references cited in support of a § 103 rejection must not be considered alone and, instead, obviousness is determined based on what the combination of references would teach one skilled in the art. Nevertheless, in the current case, the applicants respectfully submit that the combination of references would not lead one skilled in the art to the applicants' specific and advantageous method for non-phytotoxic control of *Ralstonia* through soil fumigation. In this regard, please note that CA '288 does not pertain to soil fumigation (or the control of *Ralstonia*) and, like the Soler-Serratosa *et al.* experiments, the CA '288 patent reports highly variable results. Thus, although in one formulation, the CA '288 authors use a detergent in their "plant hygiene disinfectant" composition, there is no indication that a detergent should be used

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in a soil fumigant composition or that a detergent could be used with ethanol in a specific thymol composition to facilitate the control of *Ralstonia* without phytotoxicity. In fact, in CA '288 a thymol/ethanol composition was actually used as a control against which a composition of thymol/aromatic alcohol was said to be preferable.

Thus, although Momol *et al.* (1999) report that thymol has activity against *Ralstonia* in vitro, the art as a whole teaches away from using thymol alone as a control agent and certainly does not suggest the applicants' specific method whereby control of *Ralstonia* can be achieved with so little phytotoxicity that the market basket of tomatoes is increased.

Accordingly, the applicants respectfully request reconsideration and withdrawal of the rejection set forth under 35 U.S.C. §103.

In view of the foregoing remarks and the amendment above, the applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

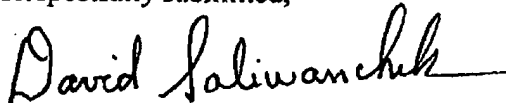
The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

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The applicants also invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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Attachment: Expert Declaration under 37 CFR §1.132
Curriculum Vitae

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